(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: METHOD AND APPARATUS FOR WRITING OPTICALLY READABLE DATA ONTO AN OPTICAL DATA.
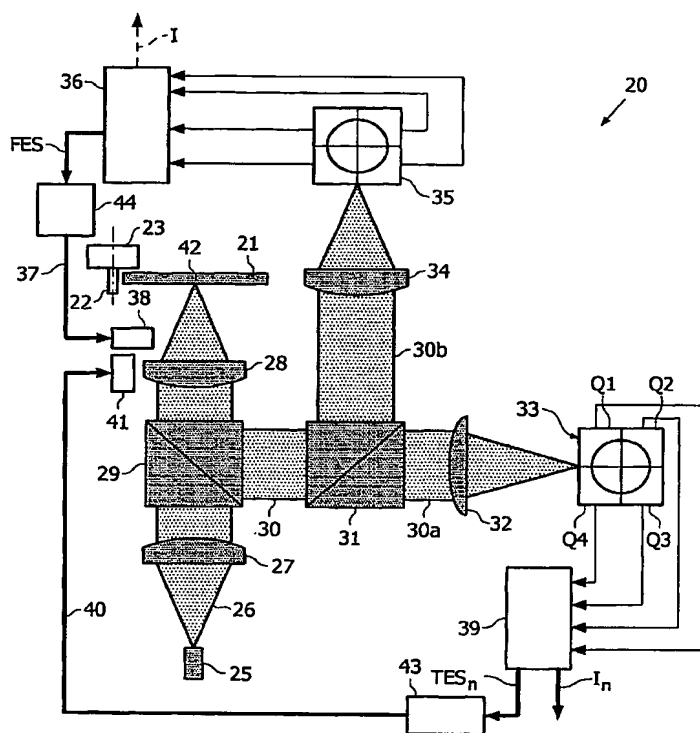
(57) Abstract: The invention relates to an apparatus (20) for reading data from and/or writing data onto an optical data carrier (21) is proposed. An optical source generates an incident beam (26), an objective lens assembly (28) focuses the incident beam onto the optical data carrier. A thin convex lens (32) without substantial astigmatism is used for projecting the returning beam (30) onto an optical detection assembly (33) for generating a tracking error signal. An optical data carrier has a recording layer, onto which optically readable data is written in the form of binary marks or pits (11). The binary marks are capable of causing a phase difference which lies close to 180° between reflected light which has interacted with said binary marks and reflected light which has interacted with the rest of the recording layer. The signal to noise ratio of data signal and tracking error signal are improved at the same time.